IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Confirmation No.: **2569**
Beresnevichiene et al.	Group Art Unit: **2436**
Serial No.: **10/765,719**	Examiner: **Louie, Oscar A**
Filed: **January 26, 2004**	Docket No.: **200207541-2**

For: **DATA HANDLING APPARATUS AND METHODS**

CORRECTED APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Appeal Brief under 37 C.F.R. § 41.37 is submitted in support of the Notice of Appeal filed June 19, 2009 responding to the final Office Action mailed April 29, 2009.

It is not believed that extensions of time or fees are required to consider this Appeal Brief. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. §1.136(a), and any fees required are hereby authorized to be charged to Deposit Account No. 08-2025.

I. Real Party in Interest

The real party in interest is Hewlett-Packard Development Company, L.P., a limited partnership established under the laws of the State of Texas and having a principal place of business at 11445 Compaq Center Drive West Houston, TX 77707, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

II. Related Appeals and Interferences

There are no other known related appeals or interferences.

III. Status of Claims

Claims 1, 3-12, 17-20, 22-29, 31-33, 36, and 38-41 stand finally rejected. No claims have been allowed. Claim 2 has been canceled. Claims 3 and 22 have been objected to because of informalities. Claims 13-16, 21, 30, 34-35, and 37 have been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The rejections of claims 1, 3-12, 17-20, 22-29, 31-33, 36, and 38-41 are appealed.

IV. Status of Amendments

No amendments have been made subsequent to the final Office Action mailed April 29, 2009. The claims in the attached Claims Appendix (see below) reflect the present state of Appellants' claims.

V. Summary of Claimed Subject Matter

The claimed inventions are summarized below with reference numerals and references to the written description ("specification") and drawings. The subject matter described in the following appears in the original disclosure at least where indicated, and may further appear in other places within the original disclosure.

Embodiments according to independent claim 1 describe a data handling apparatus [*see e.g.* 400, FIG. 8; page 27, lines 19-33] for a computer platform [*see e.g.* FIG. 1; page 10, lines 16-33] using an operating system [*see e.g.* page 26, line 15 – page 27, line 8] executing a process. The apparatus comprises a system call monitor [*see e.g.* 402, FIG. 8; page 27, line 19 – page 30, line 13] for detecting predetermined system calls and data manipulated by the process so as to modify identifiable characteristics of the data [*see e.g.* 130, FIG. 2; page 2, lines 23-31; page 15, line 10 – page 31, line 15]. The apparatus further comprises means for applying a data handling policy [*see e.g.* page 28, line 9 – page 31, line 15] upon detecting: (1) a predetermined data type based on a tag or label [*see e.g.* 130, FIG. 2; page 2, lines 23-31; page 15, line 10 – page 22, line 5]. associated with the data manipulated by the process or based on the format of the data manipulated by the process; and (2) a predetermined system call being detected, whereby the data handling policy is applied for all system calls involving the writing of data outside the process [*see e.g.* page 18, line 17 – page 20, line 2].

Embodiments according to independent claim 22 describe a data handling method for a computer platform [*see e.g.* FIG. 1; page 10, lines 16-33] using an operating system [*see e.g.* page 26, line 15 – page 27, line 8] executing a process. The method comprises the step of detecting both (i) a predetermined data type based on a tag or label [*see e.g.* 130, FIG. 2; page 2, lines 23-31; page 15, line 10 – page 31, line 15] associated with the data or based on the format of the data and (ii) predetermined system calls involving the writing of data outside the process [*see e.g.* 402, FIG. 8; page 27, line 19 – page 30, line 13]. The method further comprises the step of applying a data handling policy [*see e.g.* page 28, line 9 – page 31, line

15] to a system call upon both said predetermined data type and said a predetermined system call being detected, the data handling policy being applied for all system calls involving the writing of data outside the process [*see e.g.* page 6, lines 1-10; page 18, line 17 – page 20, line 2].

Embodiments according to independent claim 41 describe a data handling apparatus for a computer platform [*see e.g.* FIG. 1; page 10, lines 16-33] using an operating system [*see e.g.* page 26, line 15 – page 27, line 8] executing a process. The apparatus comprises a system call monitor [*see e.g.* 402, FIG. 8; page 27, line 19 – page 30, line 13] for detecting predetermined system calls and data handled by the process. The apparatus further comprises a policy applicator for applying a data handling policy [*see e.g.* page 28, line 9 – page 31, line 15] to the system call upon both (i) a predetermined data type based on a tag or label [*see e.g.* 130, FIG. 2; page 2, lines 23-31; page 15, line 10 – page 31, line 15] associated with the data handled by the process or based on the format of the data handled by the process and (ii) a predetermined system call which involves the writing of data outside the process [*see e.g.* page 6, lines 1-10; page 18, line 17 – page 20, line 2].

VI. <u>Grounds of Rejection to be Reviewed on Appeal</u>

The following grounds of rejections are to be reviewed on appeal:

A.   Claim 1 has been rejected under 35 U.S.C. 112, second paragraph, as allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

B.   Claims 1, 4-5, 7, 22, 25-27, and 39-41 have been rejected under 35 U.S.C. 103(a) as allegedly unpatentable over *Meyers et al.* (U.S. Patent No. 5,937,159, hereafter "*Meyers*").

C.   Claims 3, 6, 23-24, and 28 have been rejected under 35 U.S.C. 103(a) as allegedly unpatentable over *Meyers* in view of *Choo* (U.S. Patent No. 6,981,140, hereafter "*Choo*").

D.   Claims 8-12, 17-20, 29, 31-33, and 36 have been rejected under 35 U.S.C. 103(a) as allegedly unpatentable over *Meyers* in view of *Yoshioka et al.* (U.S. Patent No. 5,909,688, hereafter "*Yoshioka*").

E.   Claim 38 has been rejected under 35 U.S.C. 103(a) as allegedly unpatentable over *Meyers* in view of *Johnson et al.* (U.S. Patent No. 5,684,948, hereafter "*Johnson*").

VII. <u>Arguments</u>

For the reasons that follow, Appellants request that the rejections of claims 1, 3-12, 17-20, 22-29, 31-33, 36, and 38-41 be overturned.

A.   Rejection of Claim 1 under 35 U.S.C. §112, Second Paragraph

Claim 1 has been rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, the Office Action alleges on page 3 that:

> Claim 1 line 8 recites "a predetermined system call" however, it is unclear as to whether this is a separate "predetermined system call" or the same as the earlier recited one;

Appellants respectfully disagree. Appellants' claim 1 provides as follows:

> A data handling apparatus ... comprising
> a system call monitor for detecting predetermined system calls and
> data manipulated by the process ..., and
> means for applying a data handling policy upon detecting:
> (1) a predetermined data type ...; and
> (2) a predetermined system call being detected...

Appellants submit that "for detecting predetermined system calls" is functional language associated with the "system call monitor", while "a predetermined system call being detected" is part of a condition ("upon detecting..."). Appellants respectfully submit that the meaning of "a predetermined system call being detected" is clear when the claim is read as a whole. Accordingly, Appellants submit that claim 1 defines the invention in the manner required by 35 U.S.C. § 112 and respectfully request that the rejection be overturned.

B. Rejection of Claims 1, 4-5, 7, 22, 25-27, and 39-41 under 35 U.S.C. §103(a): *Meyers*

1. Independent Claim 1

Appellants' claim 1 provides as follows (emphasis added):

> A data handling apparatus for a computer platform using an operating system executing a process, the apparatus comprising
> ***a system call monitor for detecting predetermined system calls and data manipulated by the process so as to modify identifiable characteristics of the data***, and
> ***means for applying a data handling policy upon detecting:***
> ***(1) a predetermined data type based on a tag or label associated with the data manipulated by the process or based on the format of the data manipulated by the process; and***
> ***(2) a predetermined system call being detected, whereby the data handling policy is applied for all system calls involving the writing of data outside the process***.

Appellants respectfully submit that independent claim 1 is allowable for at least the reason that *Meyers* does not disclose, teach, or suggest at least the features recited and emphasized above in claim 1.

The Office Action states on pages 4-5 that:

> Meyers et al... do not explicitly disclose ... "a system call monitor for detecting predetermined system calls and data manipulated by the

process so as to modify identifiable characteristics of the data," although
<u>Meyers et al.</u> do suggest an authentication daemon changing
authentication data, as recited below...

<u>Meyers et al.</u> do disclose ... "The authentication daemon can perform a
number of functions upon request: (a) It can check to see if a user is
authentic. The particular authentication data used and the means used to
authenticate the user depend on the particular AD. (b) It can change the
authentication data..." [column 4 lines 36-49]...

(Emphasis in original). As such, the Office Action appears to allege that the authentication

daemon corresponds to "a system call monitor". Appellants respectfully disagree. Appellants

submit that neither checking to see if a user is authentic nor changing the authentication data is

the same as "detecting predetermined system calls and data manipulated by the process".

Thus, *Meyers* does not disclose or suggest "a system call monitor for detecting predetermined

system calls and data manipulated by the process so as to modify identifiable characteristics of

the data" as recited in claim 1.

The Office Action further states on pages 4-5 that:

<u>Meyers et al</u>... do not explicitly disclose ... "means for applying a data
handling policy upon detecting: a predetermined data type based on a tag
or label associated with the data manipulated by the process or based on
the format of the data manipulated by the process," although <u>Meyers et
al.</u> do suggest access control policies between subjects (i.e. process) and
system objects (i.e. data), as recited below... "a predetermined system
call which involves the writing of data outside the process," although
<u>Meyers et al.</u> do suggest printing data out, as recited below...

<u>Meyers et al.</u> do disclose ... "Access Control Policies... mandatory
access control is an access policy that controls a subject's access to
information and objects. The system enforces the policy by comparing
the sensitivity of the information for the object (its MAC label or MAC
tuple) to the MAC tuple of the subject's process...compares the object's
sensitivity to the MAC label of the subject's process...relationship of the
MAC label and the MAC tuple determines if a subject can read an object,
write to an object, or is denied access to the object... MAC label--a label
placed on subjects and objects in order to enforce the MAC policy. The
label consists of a hierarchical component (classification of information
sensitivity) and one or more categories (unrelated groups of users)
following the syntax: hierarchy: (category1, category2 . . .)..." [column 6
lines 9-32]... "...It can print the data or convert it to some other human
readable form, for example, ASCII text..." [column 4 lines 45-46]...

(Emphasis in original). Appellants respectfully disagree. Even though *Meyers* teaches "comparing the <u>sensitivity</u> of the information for the object ... to the MAC tuple of the subject's process", *Meyers* does not disclose or suggest "detecting... a <u>predetermined data type</u> based on a tag or label associated with the data manipulated by the process". While *Meyers* teaches that "MAC label... consists of a hierarchical component (classification of information sensitivity) and one or more categories (unrelated groups of users)" (col. 6, lines 20-24), *Meyers* does not disclose or suggest detecting a predetermined data type based on the MAC label. Nor does *Meyers* disclose or suggest "detecting... a predetermined data type ... based on the format of the data manipulated by the process". Thus, *Meyers* does not teach or suggest "applying a data handling policy upon detecting... a predetermined data type based on a tag or label associated with the data manipulated by the process or based on the format of the data manipulated by the process" as recited in claim 1.

Nor does *Meyers* disclose or suggest "applying a data handling policy upon detecting... a predetermined system call being detected, whereby the data handling policy is applied for all system calls involving the writing of data outside the process" as recited in claim 1. Appellants submit that printing or converting data to a human readable form is not the same as "detecting... a predetermined system call". Even assuming, for the sake of argument, that printing data is initiated by a system call, *Meyers* does not teach or suggest detecting system calls, much less detecting "system calls involving the writing of data outside the process." Nor does *Meyers* disclose or suggest "the data handling policy is applied for all system calls involving the writing of data outside the process."

Further, the Office Action does not even allege that *Meyers* discloses or suggests "applying a data handling policy upon detecting... a predetermined system call...", much less "applying a data handling policy upon detecting: (1) a predetermined data type... <u>and</u> (2) a predetermined system call..." (emphasis added). Appellants submit that *Meyers* does not teach or suggest "means for applying a data handling policy upon detecting: (1) a predetermined data

type based on a tag or label associated with the data manipulated by the process or based on the format of the data manipulated by the process; and (2) a predetermined system call being detected, whereby the data handling policy is applied for all system calls involving the writing of data outside the process" as recited in claim 1.

The Office Action also provides an alleged motivation for modifying *Meyers* on pages 5-6, which states:

> ...it would have been obvious for one of ordinary skill in the art at the time of the applicant's invention to include, "a system call monitor for detecting predetermined system calls and data manipulated by the process so as to modify identifiable characteristics of the data" and "means for applying a data handling policy upon detecting: a predetermined data type based on a tag or label associated with the data manipulated by the process or based on the format of the data manipulated by the process" and "a predetermined system call which involves the writing of data outside the process" in the invention as disclose by <u>Meyers et al.</u> for the purposes of providing process access control to data without having to implement large monolithic processes.

Appellants respectfully disagree. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). As discussed above, *Meyers* does not disclose or suggest all of the features of claim 1. Moreover, while *Meyers* discloses that "There are a number of benefits of breaking up functions which the prior art had implemented as large monolithic processes" (col. 5, lines 11-13), the Office Action fails to present any reasoning as to why the undisclosed claim features would be obvious. To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

Nor does the Office Action present a convincing line of reasoning as to why providing process access control to data without having to implement large monolithic processes would be a motivation to include the undisclosed features in the invention of *Meyers*. Specifically, *Meyers* discloses "A session service... which the prior art had implemented as a single process executing in a single address space has been partitioned into multiple processes. In addition, each function in the session service has been given well defined interfaces" (col. 5, lines 6-10). Further, as cited in the Office Action, *Meyers* discloses "Access Control Policies... mandatory access control is an access policy that controls a subject's access to information and objects" (col. 6, lines 5-10). As such, *Meyers* appears to disclose non-monolithic processes that include access control policies. Appellants submit that it would not be obvious for one skilled in the art to include non-disclosed features to solve a problem already solved by the reference. Nor would it be obvious for one skilled in the art to look outside a reference to solve a problem already solved by the reference. *See Ex parte Rinkevich*, 2007 WL 1552288 (BPAI May 29, 2007) (No. 2007-1317, Tech. Ctr. 2100). Accordingly, Appellants submit that the Office Action fails to present a convincing line of reasoning as to why one skilled in the art would have found the claimed invention to have been obvious in light of the teachings of *Meyers*.

Rather, it appears that the only suggestion or motivation comes from Appellants' own disclosure. As is well established in the law, such hindsight to the Appellants' own disclosure is *per se* improper. *See Crown Operations International, Ltd. v. Solutia, Inc.*, 289 F.3d 1367, 62 USPQ2d 1917 (Fed. Cir. 2002) (a determination of obviousness cannot be based on a hindsight combination of components selectively culled from the prior art to fit the parameters of the invention). Appellants respectfully submit that "it is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teaching of the prior art so that the claimed invention is rendered obvious. ... 'One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.'" *In re Fritch*, 972 FG.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992).

For at least the reasons described above, *Meyers* fails to disclose, teach or suggest all of the features recited in claim 1. Nor has a *prima facie* case of obviousness been established using the art of record. Therefore, Appellants respectfully request that the rejection of claim 1 be overturned.

2.   Dependent Claims 4-5 and 7

Because independent claim 1 is allowable over *Meyers*, Appellants respectfully submit that claims 4-5 and 7 are allowable for at least the reason that each depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Appellants respectfully request that the rejection of claims 4-5 and 7 be overturned.

3.   Independent Claim 22

Appellants' claim 22 provides as follows (emphasis added):

> A data handling method for a computer platform using an operating system executing a process, the method comprising the steps of:
>   ***detecting both (i) a predetermined data type based on a tag or label associated with the data or based on the format of the data and (ii) predetermined system calls involving the writing of data outside the process***, and
>   ***applying a data handling policy to a system call upon both said predetermined data type and said a predetermined system call being detected, the data handling policy being applied for all system calls involving the writing of data outside the process***.

Appellants respectfully submit that independent claim 22 is allowable for at least the reason that *Meyers* does not disclose, teach, or suggest at least the features recited and emphasized above in claim 22.

The Office Action states on pages 8-9 that:

> <u>Meyers et al</u>... do not explicitly disclose ... "detecting both a predetermined data type based on a tag or label associated with the data or based on the format of the data," although <u>Meyers et al.</u> do suggest an authentication daemon changing authentication data, as recited below... "predetermined system calls involving the writing of data outside the process," although <u>Meyers et al.</u> do suggest printing data out, as recited below...

> Meyers et al. do disclose ... "The authentication daemon can perform a number of functions upon request: (a) It can check to see if a user is authentic. The particular authentication data used and the means used to authenticate the user depend on the particular AD. (b) It can change the authentication data..." [column 4 lines 36-49]... "...It can print the data or convert it to some other human readable form, for example, ASCII text..." [column 4 lines 45-46]...

(Emphasis in original). Appellants respectfully disagree. Appellants submit that neither checking to see if a user is authentic nor changing the authentication data is the same as "detecting ... a predetermined data type based on a tag or label associated with the data". Nor does *Meyers* disclose or suggest "detecting... a predetermined data type ... based on the format of the data".

Additionally, *Meyers* does not disclose or suggest "detecting ... predetermined system calls involving the writing of data outside the process" as recited in claim 22. Appellants submit that printing or converting data to a human readable form is not the same as "detecting... a predetermined system call". Even assuming, for the sake of argument, that printing data is initiated by a system call, *Meyers* does not teach or suggest detecting system calls, much less "detecting ... predetermined system calls involving the writing of data outside the process."

Further, the Office Action does not even allege that *Meyers* discloses or suggests "detecting both (i) a predetermined data type... and (ii) predetermined system calls..." (emphasis added). Appellants submit that *Meyers* does not teach or suggest "detecting both (i) a predetermined data type based on a tag or label associated with the data or based on the format of the data and (ii) predetermined system calls involving the writing of data outside the process" as recited in claim 22.

The Office Action further states on pages 8-9 that:

> Meyers et al... do not explicitly disclose ... "applying a data handling policy to a system call upon both said predetermined data type and said a predetermined system call being detected," although Meyers et al. do suggest access control policies between subjects (i.e. process) and system objects (i.e. data) utilizing mandatory access control labels or tuples, as recited below... "the data handling policy being applied for all

system calls involving the writing of data outside the process," although Meyers et al. do suggest printing data out, as recited below...

> Meyers et al. do disclose ... "Access Control Policies... mandatory access control is an access policy that controls a subject's access to information and objects. The system enforces the policy by comparing the sensitivity of the information for the object (its MAC label or MAC tuple) to the MAC tuple of the subject's process...compares the object's sensitivity to the MAC label of the subject's process...relationship of the MAC label and the MAC tuple determines if a subject can read an object, write to an object, or is denied access to the object... MAC label--a label placed on subjects and objects in order to enforce the MAC policy. The label consists of a hierarchical component (classification of information sensitivity) and one or more categories (unrelated groups of users) following the syntax: hierarchy: (category1, category2 . . .)..." [column 6 lines 9-32]... "...It can print the data or convert it to some other human readable form, for example, ASCII text..." [column 4 lines 45-46]...

(Emphasis in original). Appellants respectfully disagree. Even though *Meyers* teaches "enforc[ing] the policy by comparing the <u>sensitivity</u> of the information for the object ... to the MAC tuple of the subject's process", *Meyers* does not disclose or suggest "applying a data handling policy to a system call upon ... said <u>predetermined data type</u> ... being detected". While *Meyers* teaches that "MAC label... consists of a hierarchical component (classification of information sensitivity) and one or more categories (unrelated groups of users)" (col. 6, lines 20-24), *Meyers* does not disclose or suggest detecting a predetermined data type based on the MAC label. Nor does *Meyers* disclose or suggest "applying a data handling policy to a system call upon ... said ... <u>predetermined system call</u> being detected". Thus, *Meyers* does not teach or suggest "applying a data handling policy to a system call upon both said predetermined data type and said ... predetermined system call being detected" as recited in claim 22.

Nor does *Meyers* disclose or suggest "the data handling policy being applied for all system calls involving the writing of data outside the process" as recited in claim 22. Appellants submit that printing or converting data to a human readable form is not the same as applying a data handling policy to a system call. Even assuming, for the sake of argument, that printing data is initiated by a system call, *Meyers* does not teach or suggest detecting system calls, much less applying data handling policy to system calls. Nor does *Meyers* disclose or suggest

"the data handling policy being applied for all system calls involving the writing of data outside the process."

Further, the Office Action does not even allege that *Meyers* discloses or suggests "applying a data handling policy to a system call upon … said a predetermined system call being detected", much less "applying a data handling policy to a system call upon <u>both</u> said predetermined data type and said a predetermined system call being detected" (emphasis added). Thus, *Meyers* does not teach or suggest "applying a data handling policy to a system call upon both said predetermined data type and said a predetermined system call being detected, the data handling policy being applied for all system calls involving the writing of data outside the process" as recited in claim 22.

The Office Action also provides an alleged motivation for modifying *Meyers* on pages 9-10, which states:

> …it would have been obvious for one of ordinary skill in the art at the time of the applicant's invention to include, "detecting both a predetermined data type based on a tag or label associated with the data or based on the format of the data" and "predetermined system calls involving the writing of data outside the process" and "applying a data handling policy to a system call upon both said predetermined data type and said a predetermined system call being detected" and "the data handling policy being applied for all system calls involving the writing of data outside the process" in the invention as disclose by <u>Meyers et al.</u> for the purposes of providing process access control to data without having to implement large monolithic processes.

Appellants respectfully disagree. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). As discussed above, *Meyers* does not disclose or suggest all of the features of claim 22. Moreover, while *Meyers* discloses that "There are a number of benefits of breaking up functions which the prior art had implemented as large monolithic processes" (col. 5, lines 11-13), the

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Office Action fails to present any reasoning as to why the undisclosed claim features would be obvious. To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

Nor does the Office Action present a convincing line of reasoning as to why providing process access control to data without having to implement large monolithic processes would be a motivation to include the undisclosed features in the invention of *Meyers*. Specifically, *Meyers* discloses "A session service... which the prior art had implemented as a single process executing in a single address space has been partitioned into multiple processes. In addition, each function in the session service has been given well defined interfaces" (col. 5, lines 6-10). Further, as cited in the Office Action, *Meyers* discloses "Access Control Policies... mandatory access control is an access policy that controls a subject's access to information and objects" (col. 6, lines 5-10). As such, *Meyers* appears to disclose non-monolithic processes that include access control policies. Appellants submit that it would not be obvious for one skilled in the art to include non-disclosed features to solve a problem already solved by the reference. Nor would it be obvious for one skilled in the art to look outside a reference to solve a problem already solved by the reference. *See Ex parte Rinkevich*, 2007 WL 1552288 (BPAI May 29, 2007) (No. 2007-1317, Tech. Ctr. 2100). Accordingly, Appellants submit that the Office Action fails to present a convincing line of reasoning as to why one skilled in the art would have found the claimed invention to have been obvious in light of the teachings of *Meyers*.

Rather, it appears that the only suggestion or motivation comes from Appellants' own disclosure. As is well established in the law, such hindsight to the Appellants' own disclosure is *per se* improper. *See Crown Operations International, Ltd. v. Solutia, Inc.*, 289 F.3d 1367, 62 USPQ2d 1917 (Fed. Cir. 2002) (a determination of obviousness cannot be based on a hindsight

combination of components selectively culled from the prior art to fit the parameters of the invention). Appellants respectfully submit that "it is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teaching of the prior art so that the claimed invention is rendered obvious. ... 'One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.'" *In re Fritch*, 972 FG.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992).

For at least the reasons described above, *Meyers* fails to disclose, teach or suggest all of the features recited in claim 22. Nor has a *prima facie* case of obviousness been established using the art of record. Therefore, Appellants respectfully request that the rejection of claim 22 be overturned.

4. Dependent Claims 25-27 and 39-40

Because independent claim 22 is allowable over *Meyers*, Appellants respectfully submit that claims 25-27 and 39-40 are allowable for at least the reason that each depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Appellants respectfully request that the rejection of claims 25-27 and 39-40 be overturned.

5. Independent Claim 41

Appellants' claim 41 provides as follows (emphasis added):

> A data handling apparatus for a computer platform using an operating system executing a process, the apparatus comprising
> *a system call monitor for detecting predetermined system calls and data handled by the process*, and
> *a policy applicator for applying a data handling policy to the system call upon both (i) a predetermined data type based on a tag or label associated with the data handled by the process or based on the format of the data handled by the process and (ii) a predetermined system call which involves the writing of data outside the process*.

Appellants respectfully submit that independent claim 41 is allowable for at least the reason that

Meyers does not disclose, teach, or suggest at least the features recited and emphasized above

in claim 41.

The Office Action states on pages 12-13 that:

> Meyers et al... do not explicitly disclose ... "a system call monitor for
> detecting predetermined system calls and data handled by the process,"
> although Meyers et al. do suggest an authentication daemon changing
> authentication data, as recited below...
>
> Meyers et al. do disclose ... "The authentication daemon can perform a
> number of functions upon request: (a) It can check to see if a user is
> authentic. The particular authentication data used and the means used to
> authenticate the user depend on the particular AD. (b) It can change the
> authentication data..." [column 4 lines 36-49]...

(Emphasis in original). As such, the Office Action appears to allege that the authentication

daemon corresponds to "a system call monitor". Appellants respectfully disagree. Appellants

submit that neither checking to see if a user is authentic nor changing the authentication data is

the same as "detecting predetermined system calls and data handled by the process". Thus,

Meyers does not disclose or suggest "a system call monitor for detecting predetermined system

calls and data handled by the process" as recited in claim 41.

The Office Action further states on pages 12-13 that:

> Meyers et al... do not explicitly disclose ... "a policy applicator for
> applying a data handling policy to the system call upon both a
> predetermined data type based on a tag or label associated with the data
> handled by the process or based on the format of the data handled by the
> process," although Meyers et al. do suggest access control policies
> between subjects (i.e. process) and system objects (i.e. data) utilizing
> mandatory access control labels or tuples, as recited below... "a
> predetermined system call which involves the writing of data outside the
> process," although Meyers et al. do suggest printing data out, as recited
> below...
>
> Meyers et al. do disclose ... "Access Control Policies... mandatory
> access control is an access policy that controls a subject's access to
> information and objects. The system enforces the policy by comparing
> the sensitivity of the information for the object (its MAC label or MAC
> tuple) to the MAC tuple of the subject's process...compares the object's
> sensitivity to the MAC label of the subject's process...relationship of the
> MAC label and the MAC tuple determines if a subject can read an object,

write to an object, or is denied access to the object... MAC label--a label placed on subjects and objects in order to enforce the MAC policy. The label consists of a hierarchical component (classification of information sensitivity) and one or more categories (unrelated groups of users) following the syntax: hierarchy: (category1, category2 . . .)..." [column 6 lines 9-32]... "...It can print the data or convert it to some other human readable form, for example, ASCII text..." [column 4 lines 45-46]...

(Emphasis in original). Appellants respectfully disagree. Appellants submit that printing or converting data to a human readable form is not the same as "applying a data handling policy to the system call". Even assuming, for the sake of argument, that printing data is initiated by a system call, *Meyers* does not teach or suggest "applying a data handling policy to the system call", much less "applying a data handling policy to the system call upon ... a predetermined system call which involves the writing of data outside the process" as recited in claim 41.

Nor does *Meyers* disclose or suggest "applying a data handling policy to the system call upon ... a predetermined data type based on a tag or label associated with the data handled by the process". Even though *Meyers* teaches "comparing the <u>sensitivity</u> of the information for the object ... to the MAC tuple of the subject's process", *Meyers* does not disclose or suggest detecting "a <u>predetermined data type</u> based on a tag or label associated with the data manipulated by the process". While *Meyers* teaches that "MAC label... consists of a hierarchical component (classification of information sensitivity) and one or more categories (unrelated groups of users)" (col. 6, lines 20-24), *Meyers* does not disclose or suggest a predetermined data type determined based on the MAC label. Nor does *Meyers* disclose or suggest either "applying a data handling policy to the system call upon ... a predetermined data type based on a tag or label associated with the data handled by the process" or "applying a data handling policy to the system call upon ... a predetermined data type ... based on the format of the data handled by the process". Thus, *Meyers* does not teach or suggest "a policy applicator for applying a data handling policy to the system call upon ... a predetermined data type based on a tag or label associated with the data handled by the process or based on the format of the data handled by the process" as recited in claim 41.

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Further, the Office Action does not even allege that *Meyers* discloses or suggests "applying a data handling policy to the system call upon <u>both</u> (i) a predetermined data type ... and (ii) a predetermined system call..." (emphasis added). Appellants submit that *Meyers* does not teach or suggest "a policy applicator for applying a data handling policy to the system call upon both (i) a predetermined data type based on a tag or label associated with the data handled by the process or based on the format of the data handled by the process and (ii) a predetermined system call which involves the writing of data outside the process" as recited in claim 41.

The Office Action also provides an alleged motivation for modifying *Meyers* on pages 13-14, which states:

> ...it would have been obvious for one of ordinary skill in the art at the time of the applicant's invention to include, "a system call monitor for detecting predetermined system calls and data handled by the process" and "a policy applicator for applying a data handling policy to the system call upon both a predetermined data type based on a tag or label associated with the data handled by the process or based on the format of the data handled by the process" and "a predetermined system call which involves the writing of data outside the process" in the invention as disclose by <u>Meyers et al.</u> for the purposes of providing process access control to data without having to implement large monolithic processes.

Appellants respectfully disagree. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). As discussed above, *Meyers* does not disclose or suggest all of the features of claim 41. Moreover, while *Meyers* discloses that "There are a number of benefits of breaking up functions which the prior art had implemented as large monolithic processes" (col. 5, lines 11-13), the Office Action fails to present any reasoning as to why the undisclosed claim features would be obvious. To imbue one of ordinary skill in the art with knowledge of the invention in suit, when

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no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

Nor does the Office Action present a convincing line of reasoning as to why providing process access control to data without having to implement large monolithic processes would be a motivation to include the undisclosed features in the invention of *Meyers*. Specifically, *Meyers* discloses "A session service... which the prior art had implemented as a single process executing in a single address space has been partitioned into multiple processes. In addition, each function in the session service has been given well defined interfaces" (col. 5, lines 6-10). Further, as cited in the Office Action, *Meyers* discloses "Access Control Policies... mandatory access control is an access policy that controls a subject's access to information and objects" (col. 6, lines 5-10). As such, *Meyers* appears to disclose non-monolithic processes that include access control policies. Appellants submit that it would not be obvious for one skilled in the art to include non-disclosed features to solve a problem already solved by the reference. Nor would it be obvious for one skilled in the art to look outside a reference to solve a problem already solved by the reference. *See Ex parte Rinkevich*, 2007 WL 1552288 (BPAI May 29, 2007) (No. 2007-1317, Tech. Ctr. 2100). Accordingly, Appellants submit that the Office Action fails to present a convincing line of reasoning as to why one skilled in the art would have found the claimed invention to have been obvious in light of the teachings of *Meyers*.

Rather, it appears that the only suggestion or motivation comes from Appellants' own disclosure. As is well established in the law, such hindsight to the Appellants' own disclosure is *per se* improper. *See Crown Operations International, Ltd. v. Solutia, Inc.*, 289 F.3d 1367, 62 USPQ2d 1917 (Fed. Cir. 2002) (a determination of obviousness cannot be based on a hindsight combination of components selectively culled from the prior art to fit the parameters of the invention). Appellants respectfully submit that "it is impermissible to use the claimed invention

as an instruction manual or 'template' to piece together the teaching of the prior art so that the claimed invention is rendered obvious. ... 'One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.'" *In re Fritch*, 972 FG.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992).

For at least the reasons described above, *Meyers* fails to disclose, teach or suggest all of the features recited in claim 41. Nor has a *prima facie* case of obviousness been established using the art of record. Therefore, Appellants respectfully request that the rejection of claim 41 be overturned.

C.   Rejection of Claims 3, 6, 23-24, and 28 under 35 U.S.C. §103(a): *Meyers* and *Choo*

1.   Dependent Claims 3 and 6

For the reasons discussed in section B.1 above, *Meyers* fails to disclose, teach or suggest all of the features recited in claim 1. The addition of *Choo* does not cure the deficiencies of *Meyers*. Because claim 1 is allowable over *Meyers* in view of *Choo*, Appellants respectfully submit that claims 3 and 6 are allowable for at least the reason that each depends, either directly or indirectly, from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Appellants respectfully request that the rejection of claims 3 and 6 be overturned.

2.   Dependent Claim 6

Notwithstanding, and in addition to, the arguments discussed above, Appellants respectfully request that the rejection of claim 6 be overturned for at least the reason that *Meyers* in view of *Choo* fails to disclose, teach, or suggest at least the features recited and emphasized below. Appellants' claim 6 provides as follows (emphasis added):

> A data handling apparatus according to claim 5, in which **the policy interpreter is configured to use the intended destination of the data as a factor in determining the policy for the data**.

The Office Action states on page 14 that:

Meyers et al... do not explicitly disclose ... "the policy interpreter is configured to use the intended destination of the data as a factor in determining the policy for the data," although Choo does suggest policy enforcement/access control based on where data packets come from, as recited below...

Choo does disclose ... "For incoming data packets received from the remote host across the LAN/WAN each packet received from the operating system is inspected to see if internet protocol security decryption is necessary by examining a security descriptor data comprising a part of a security association data logically associated with the data packet" [column 12 lines 54-59]...

Appellants respectfully disagree. Appellants submit that testing for a descriptor showing a packet to be encrypted is not the same as testing where a packet came from. Even assuming, *arguendo,* testing where a packet came from, the Office Action justification for turning this around to examining where the packets are going (to try to meet the limitation of "the policy interpreter is configured to use the intended destination of the data as a factor in determining the policy for the data") just does not exist. To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher. *W.L. Gore & Associates, Inc. v. Garlock, Inc.,* 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied,* 469 U.S. 851 (1984).

Indeed, as now expressly embodied in MPEP 2143, "[t]he key to supporting any rejection under 35 U.S.C. §103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. §103 should be made explicit" (emphasis added). The Court stated that "'[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.'" *KSR,* 550 U.S. at 418, 82 USPQ2d at 1396 quoting *In re Kahn,* 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). Appellants

submit that, other than a conclusory statement, the Office Action fails to articulate any reasoning to support the legal conclusion of obviousness.

Thus, for at least the reasons described above, *Meyers* in view of *Choo* further fails to disclose, teach or suggest all of the features recited in claim 6. Nor has a *prima facie* case of obviousness been established using the art of record. Therefore, Appellants respectfully request that the rejection of claim 6 be overturned.

3. Dependent Claims 23-24 and 28

For the reasons discussed in section B.3 above, *Meyers* fails to disclose, teach or suggest all of the features recited in claim 22. The addition of *Choo* does not cure the deficiencies of *Meyers*. Because claim 22 is allowable over *Meyers* in view of *Choo*, Appellants respectfully submit that claims 23-24 and 28 are allowable for at least the reason that each depends, either directly or indirectly, from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Appellants respectfully request that the rejection of claims 23-24 and 28 be overturned.

4. Dependent Claim 28

Notwithstanding, and in addition to, the arguments discussed above, Appellants respectfully request that the rejection of claim 28 be overturned for at least the reason that *Meyers* in view of *Choo* fails to disclose, teach, or suggest at least the features recited and emphasized below. Appellants' claim 28 provides as follows (emphasis added):

> A data handling method according to claim 26, in which ***the intended destination of the data is used as a factor in determining the policy for the data***.

The Office Action states on page 16 that:

> Meyers et al... do not explicitly disclose ... "the intended destination of the data is used as a factor in determining the policy for the data," although Choo does suggest policy enforcement/access control based on where data packets come from, as recited below...

Choo does disclose ... "For incoming data packets received from the remote host across the LAN/WAN each packet received from the operating system is inspected to see if internet protocol security decryption is necessary by examining a security descriptor data comprising a part of a security association data logically associated with the data packet" [column 12 lines 54-59]...

Appellants respectfully disagree. Appellants submit that testing for a descriptor showing a packet to be encrypted is not the same as testing where a packet came from. Even assuming, *arguendo*, testing where a packet came from, the Office Action justification for turning this around to examining where the packets are going (to try to meet the limitation of "the intended destination of the data is used as a factor in determining the policy for the data") just does not exist. To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

Indeed, as now expressly embodied in MPEP 2143, "[t]he <u>key to supporting any rejection under 35 U.S.C. §103 is the clear articulation of the reason(s) why the claimed invention would have been obvious</u>. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. §103 <u>should be made explicit</u>" (emphasis added). The Court stated that "'[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.'" *KSR*, 550 U.S. at 418, 82 USPQ2d at 1396 quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). Appellants submit that, other than a conclusory statement, the Office Action fails to articulate any reasoning to support the legal conclusion of obviousness.

Thus, for at least the reasons described above, *Meyers* in view of *Choo* further fails to disclose, teach or suggest all of the features recited in claim 28. Nor has a *prima facie* case of

obviousness been established using the art of record. Therefore, Appellants respectfully request that the rejection of claim 28 be overturned.

D.   Rejection of Claims 8-12, 17-20, 29, 31-33, and 36 under 35 U.S.C. §103(a): *Meyers* and *Yoshioka*

1.   Dependent Claims 8-12 and 17-20

For the reasons discussed in section B.1 above, *Meyers* fails to disclose, teach or suggest all of the features recited in claim 1. The addition of *Yoshioka* does not cure the deficiencies of *Meyers*. Because claim 1 is allowable over *Meyers* in view of *Yoshioka*, Appellants respectfully submit that claims 8-12 and 17-20 are allowable for at least the reason that each depends, either directly or indirectly, from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Appellants respectfully request that the rejection of claims 8-12 and 17-20 be overturned.

2.   Dependent Claim 8

Notwithstanding, and in addition to, the arguments discussed above, Appellants respectfully request that the rejection of claim 8 be overturned for at least the reason that *Meyers* in view of *Yoshioka* fails to disclose, teach, or suggest at least the features recited and emphasized below. Appellants' claim 8 provides as follows (emphasis added):

> A data handling apparatus according to claim 1, in which the computing platform comprises a data management unit, ***the data management unit arranged to associate data management information with data input to a process, and regulate operating system operations involving the data according to the data management information***.

The Office Action states on pages 17-18 that:

> <u>Meyers et al</u>... do not explicitly disclose ... "the data management unit arranged to associate data management information with data input to a process," although <u>Yoshioka et al.</u> do suggest entity information corresponding with each record, as recited below... "(the data management unit arranged to) regulate operating system operations involving the data according to the data management information," although <u>Yoshioka et al.</u> do suggest controlling read/write of data, as recited below...

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Yoshioka et al. do disclose ... "in a record of department in an entity
management table corresponding to the above-mentioned organization
template there are stored entity information corresponding to that record,
an XID value of, for example, a technical department, a pointer to a
section record which is a low-rank record, a pointer to a record for
another department which is in the same rank as that department, and a
pointer to that department which is the entity information item" [column 6
lines 9-17]... " The data management unit 24 controls reading or writing of
data between the database 25 and the memory 31" [column 12 lines 65-
66]...

Appellants respectfully disagree. Appellants submit that storing entity information

corresponding to a record is not the same as "associate[ing] data management information with

data input to a process". Nor is controlling the reading and writing of data between a database

and memory the same as "regulat[ing] operating system operations involving the data according

to the data management information". Thus, *Meyers* in view of *Yoshioka* does not disclose or

suggest "the data management unit arranged to associate data management information with

data input to a process, and regulate operating system operations involving the data according

to the data management information" as recited in claim 8.

The Office Action also provides an alleged motivation for modifying *Meyers* on page 18,

which states:

> ...it would have been obvious for one of ordinary skill in the art at the time
> of the applicant's invention to include, "the computing platform comprises
> a data management unit" and "the data management unit arranged to
> associate data management information with data input to a process" and
> "(the data management unit arranged to) regulate operating system
> operations involving the data according to the data management
> information," in the invention as disclose by <u>Meyers et al.</u> for the purposes
> of associating and tracking data processed in an operating system.

Appellants respectfully disagree. "To support the conclusion that the claimed invention is

directed to obvious subject matter, either the references must expressly or impliedly suggest the

claimed invention or the examiner must present a convincing line of reasoning as to why the

artisan would have found the claimed invention to have been obvious in light of the teachings of

the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). As

discussed above, *Meyers* does not disclose or suggest all of the features of claim 8. Moreover,

the Office Action fails to present any reasoning as to why the undisclosed claim features would be obvious. To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

Indeed, as now expressly embodied in MPEP 2143, "[t]he <u>key to supporting any rejection under 35 U.S.C. §103 is the clear articulation of the reason(s) why the claimed invention would have been obvious</u>. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. §103 <u>should be made explicit</u>" (emphasis added). The Court stated that "'[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.'" *KSR*, 550 U.S. at 418, 82 USPQ2d at 1396 quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). Appellants submit that, other than a conclusory statement, the Office Action fails to articulate any reasoning to support the legal conclusion of obviousness.

Rather, it appears that the only suggestion or motivation comes from Appellants' own disclosure. As is well established in the law, such hindsight to the Appellants' own disclosure is *per se* improper. *See Crown Operations International, Ltd. v. Solutia, Inc.*, 289 F.3d 1367, 62 USPQ2d 1917 (Fed. Cir. 2002) (a determination of obviousness cannot be based on a hindsight combination of components selectively culled from the prior art to fit the parameters of the invention). Appellants respectfully submit that "it is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teaching of the prior art so that the claimed invention is rendered obvious. ... 'One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.'" *In re Fritch*, 972 FG.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992).

Thus, for at least the reasons described above, *Meyers* in view of *Yoshioka* further fails to disclose, teach or suggest all of the features recited in claim 8. Nor has a *prima facie* case of obviousness been established using the art of record. Therefore, Appellants respectfully request that the rejection of claim 8 be overturned.

3.   Dependent Claim 9

Notwithstanding, and in addition to, the arguments discussed above, Appellants respectfully request that the rejection of claim 9 be overturned for at least the reason that a *prima facie* case of obviousness has not been established using the art of record. The Office Action states on pages 18-19 that

> Meyers et al... do not explicitly disclose ... "the computing platform is arranged to run the process under the control of the data management unit," although Yoshioka et al. do suggest a data management unit, as recited below...

> Yoshioka et al. do disclose ... [Fig 13 illustrates a memory arranged with other components to load and handle data processes and a data management unit]...

Appellants respectfully disagree. Appellants submit that *Meyers* in view of *Yoshioka* does not disclose or suggest "the computing platform is arranged to run the process under the control of the data management unit" as recited in claim 9. While the Office Action concedes on pages 18-19 that *Meyers* does not disclose the features of claim 9, the Office Action does not even allege that *Yoshioka* teaches or suggests that "the computing platform ... is arranged to ... run the process under the control of the data management unit" (emphasis added). "35 U.S.C. 132 requires that the applicant be notified of the reasons for the rejection of the claim so that he or she can decide how best to proceed." MPEP § 2141(II). As expressly embodied in MPEP 2143, "[t]he key to supporting any rejection under 35 U.S.C. §103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. §103 should be made explicit" (emphasis added). The Court stated that "'[R]ejections on obviousness cannot be sustained by

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mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.'" *KSR*, 550 U.S. at 418, 82 USPQ2d at 1396 quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). Thus, for at least the reasons discussed above, Appellants submit that a *prima facie* case of obviousness has not been established using the art of record. Therefore, Appellants respectfully request that the rejection of claim 9 be overturned.

4.   Dependent Claim 10

Notwithstanding, and in addition to, the arguments discussed above, Appellants respectfully request that the rejection of claim 10 be overturned for at least the reason that *Meyers* in view of *Yoshioka* fails to disclose, teach, or suggest at least the features recited and emphasized below. Appellants' claim 10 provides as follows (emphasis added):

> A data handling apparatus according to claim 8, in which *the data management information is associated with at least one data sub-unit as data is input to a process from a data unit comprising a plurality of sub-units*.

The Office Action states on pages 19-20 that "<u>Meyers et al</u>... do not explicitly disclose ... "the data management information is associated with at least one data sub-unit as data is input to a process from a data unit comprising a plurality of sub-units," although <u>Yoshioka et al.</u> do suggest a data management unit connected to additional components". Appellants respectfully disagree. Appellants submit that additional components such as a policy unit and a memory are not the same as a "data sub-unit". Thus, *Meyers* in view of *Yoshioka* does not disclose or suggest "the data management information is associated with at least one data sub-unit as data is input to a process from a data unit comprising a plurality of sub-units" as recited in claim 10.

The Office Action also provides an alleged motivation for modifying *Meyers* on page 20, which states:

> ...it would have been obvious for one of ordinary skill in the art at the time of the applicant's invention to include, "the data management information is associated with at least one data sub-unit as data is input to a process

from a data unit comprising a plurality of sub-units," in the invention as disclose by <u>Meyers et al.</u> since the data management unit would associated data according to the policies of the subunits as data input for the purposes of handling data processing.

Appellants respectfully disagree. As expressly embodied in MPEP 2143, "[t]he <u>key to supporting any rejection under 35 U.S.C. §103 is the clear articulation of the reason(s) why the claimed invention would have been obvious</u>. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. §103 <u>should be made explicit</u>" (emphasis added). The Court stated that "'[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.'" *KSR*, 550 U.S. at 418, 82 USPQ2d at 1396 quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). Appellants submit that, other than a conclusory statement, the Office Action fails to articulate any reasoning to support the legal conclusion of obviousness.

Rather, it appears that the only suggestion or motivation comes from Appellants' own disclosure. As is well established in the law, such hindsight to the Appellants' own disclosure is *per se* improper. *See Crown Operations International, Ltd. v. Solutia, Inc.*, 289 F.3d 1367, 62 USPQ2d 1917 (Fed. Cir. 2002) (a determination of obviousness cannot be based on a hindsight combination of components selectively culled from the prior art to fit the parameters of the invention). Appellants respectfully submit that "it is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teaching of the prior art so that the claimed invention is rendered obvious. ... 'One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.'" *In re Fritch*, 972 FG.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992).

Thus, for at least the reasons described above, *Meyers* in view of *Yoshioka* further fails to disclose, teach or suggest all of the features recited in claim 10. Nor has a *prima facie* case

of obviousness been established using the art of record. Therefore, Appellants respectfully request that the rejection of claim 10 be overturned.

5.   Dependent Claim 12

Notwithstanding, and in addition to, the arguments discussed above, Appellants respectfully request that the rejection of claim 12 be overturned for at least the reason that a *prima facie* case of obviousness has not been established using the art of record. The Office Action states on page 21 that

> Meyers et al... do not explicitly disclose ... "the data management unit comprises part of an operating system kernel space," although Yoshioka et al. do suggest a data management unit, as recited below...
>
> Yoshioka et al. do disclose ... " The data management unit 24 controls reading or writing of data between the database 25 and the memory 31" [column 12 lines 65-66]...

Appellants respectfully disagree. Appellants submit that *Meyers* in view of *Yoshioka* does not disclose or suggest "the data management unit comprises part of an operating system kernel space" as recited in claim 12. While the Office Action concedes that *Meyers* does not disclose the features of claim 12, the Office Action does not even allege that *Yoshioka* teaches or suggests that "the data management unit comprises part of an operating system kernel space." (emphasis added). "35 U.S.C. 132 requires that the applicant be notified of the reasons for the rejection of the claim so that he or she can decide how best to proceed." MPEP § 2141(II). As expressly embodied in MPEP 2143, "[t]he key to supporting any rejection under 35 U.S.C. §103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. §103 should be made explicit" (emphasis added). The Court stated that "'[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.'" *KSR*, 550 U.S. at 418, 82 USPQ2d at 1396 quoting *In re Kahn*, 441 F.3d 977,

988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). Thus, for at least the reasons discussed above, Appellants submit that a *prima facie* case of obviousness has not been established using the art of record. Therefore, Appellants respectfully request that the rejection of claim 12 be overturned.

6.   Dependent Claim 17

Notwithstanding, and in addition to, the arguments discussed above, Appellants respectfully request that the rejection of claim 17 be overturned for at least the reason that a *prima facie* case of obviousness has not been established using the art of record. The Office Action states on page 22 that

> Meyers et al... do not explicitly disclose ... "the data management unit comprises a data filter to identify data management information associated with data that is to be read into the memory space," although Yoshioka et al. do suggest a data management unit reading/writing data between a database and memory, as recited below...

> Yoshioka et al. do disclose ... [Fig 13 illustrates a memory arranged with other components to load and handle data processes and a data management unit]...

Appellants respectfully disagree. Appellants submit that *Meyers* in view of *Yoshioka* does not disclose or suggest "the data management unit comprises a data filter to identify data management information associated with data that is to be read into the memory space" as recited in claim 17. While the Office Action concedes that *Meyers* does not disclose the features of claim 17, the Office Action does not even allege that *Yoshioka* teaches or suggests that "the data management unit comprises a data filter to identify data management information associated with data that is to be read into the memory space" (emphasis added). "35 U.S.C. 132 requires that the applicant be notified of the reasons for the rejection of the claim so that he or she can decide how best to proceed." MPEP § 2141(II). As expressly embodied in MPEP 2143, "[t]he key to supporting any rejection under 35 U.S.C. §103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR*

noted that the analysis supporting a rejection under 35 U.S.C. §103 <u>should be made explicit</u>" (emphasis added). The Court stated that "'[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.'" *KSR*, 550 U.S. at 418, 82 USPQ2d at 1396 quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). Thus, for at least the reasons discussed above, Appellants submit that a *prima facie* case of obviousness has not been established using the art of record. Therefore, Appellants respectfully request that the rejection of claim 17 be overturned.

7.   Dependent Claims 18-20

Notwithstanding, and in addition to, the arguments discussed above, Appellants respectfully request that the rejection of claims 18-20 be overturned for at least the reason that a *prima facie* case of obviousness has not been established using the art of record. Appellants submit that *Meyers* in view of *Yoshioka* does not disclose or suggest either "the data management unit further comprises a tag management module arranged to allow a user to specify data management information to be associated with data" as recited in claim 18, "the data management unit comprises a tag propagation module arranged to maintain an association with the data that has been read into the process and the data management information associated therewith" as recited in claim 19, or "the tag propagation module is arranged to maintain an association between an output of operations carried out within the process and the data management information associated with the data involved in the operations" as recited in claim 20. While the Office Action concedes on pages 22-24 that *Meyers* does not disclose the features of claims 18-20, the Office Action does not even allege that *Yoshioka* teaches or suggests either "a tag management module" or "a tag propagation module".

Nor does the Office Action even allege that *Yoshioka* discloses or suggests the data management unit comprising "a tag management module arranged to allow a user to specify

data management information to be associated with data" as recited in claim 18, "a tag propagation module arranged to maintain an association with the data that has been read into the process and the data management information associated therewith" as recited in claim 19, or "a tag management module arranged to allow a user to specify data management information to be associated with data" as recited in claim 20. "35 U.S.C. 132 requires that the applicant be notified of the reasons for the rejection of the claim so that he or she can decide how best to proceed." MPEP § 2141(II). As expressly embodied in MPEP 2143, "[t]he key to supporting any rejection under 35 U.S.C. §103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. §103 should be made explicit" (emphasis added). The Court stated that "'[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.'" *KSR*, 550 U.S. at 418, 82 USPQ2d at 1396 quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). Thus, for at least the reasons discussed above, Appellants submit that a *prima facie* case of obviousness has not been established using the art of record. Therefore, Appellants respectfully request that the rejection of claims 18-20 be overturned.

8.   Dependent Claims 29, 31-33, and 36

For the reasons discussed in section B.3 above, *Meyers* fails to disclose, teach or suggest all of the features recited in claim 22. The addition of *Yoshioka* does not cure the deficiencies of *Meyers*. Because claim 22 is allowable over *Meyers* in view of *Choo*, Appellants respectfully submit that claims 29, 31-33, and 36 are allowable for at least the reason that each depends, either directly or indirectly, from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Appellants respectfully request that the rejection of claims 29, 31-33, and 36 be overturned.

9.   **Dependent Claim 29**

Notwithstanding, and in addition to, the arguments discussed above, Appellants respectfully request that the rejection of claim 29 be overturned for at least the reason that *Meyers* in view of *Yoshioka* fails to disclose, teach, or suggest at least the features recited and emphasized below. Appellants' claim 29 provides as follows (emphasis added):

> A data handling method according to claim 22, in which **the method further comprises the steps of: (a) associating data management information with data input to a process; and (b) regulating operating system operations involving the data according to the data management information**.

The Office Action states on pages 17-18 that:

> Meyers et al... do not explicitly disclose ... "the data management unit arranged to associate data management information with data input to a process," although Yoshioka et al. do suggest entity information corresponding with each record, as recited below... "(the data management unit arranged to) regulate operating system operations involving the data according to the data management information," although Yoshioka et al. do suggest controlling read/write of data, as recited below...

> Yoshioka et al. do disclose ... "in a record of department in an entity management table corresponding to the above-mentioned organization template there are stored entity information corresponding to that record, an XID value of, for example, a technical department, a pointer to a section record which is a low-rank record, a pointer to a record for another department which is in the same rank as that department, and a pointer to that department which is the entity information item" [column 6 lines 9-17]... " The data management unit 24 controls reading or writing of data between the database 25 and the memory 31" [column 12 lines 65-66]...

Appellants respectfully disagree.   Appellants submit that storing entity information corresponding to a record is not the same as "associating data management information with data input to a process". Nor is controlling the reading and writing of data between a database and memory the same as "regulating operating system operations involving the data according to the data management information" (emphasis added). Thus, *Meyers* in view of *Yoshioka* does not disclose or suggest "the method further comprises the steps of: (a) associating data management information with data input to a process; and (b) regulating operating system

operations involving the data according to the data management information" as recited in claim 29.

The Office Action also provides an alleged motivation for modifying *Meyers* on page 18, which states:

> ...it would have been obvious for one of ordinary skill in the art at the time of the applicant's invention to include, "the computing platform comprises a data management unit" and "the data management unit arranged to associate data management information with data input to a process" and "(the data management unit arranged to) regulate operating system operations involving the data according to the data management information," in the invention as disclose by Meyers et al. for the purposes of associating and tracking data processed in an operating system.

Appellants respectfully disagree. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). As discussed above, *Meyers* does not disclose or suggest all of the features of claim 29. Moreover, the Office Action fails to present any reasoning as to why the undisclosed claim features would be obvious. To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

Indeed, as now expressly embodied in MPEP 2143, "[t]he key to supporting any rejection under 35 U.S.C. §103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. §103 should be made explicit" (emphasis added). The Court stated that "'[R]ejections on obviousness cannot be sustained by mere conclusory

statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.'" *KSR*, 550 U.S. at 418, 82 USPQ2d at 1396 quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). Appellants submit that, other than a conclusory statement, the Office Action fails to articulate any reasoning to support the legal conclusion of obviousness.

Rather, it appears that the only suggestion or motivation comes from Appellants' own disclosure. As is well established in the law, such hindsight to the Appellants' own disclosure is *per se* improper. *See Crown Operations International, Ltd. v. Solutia, Inc.*, 289 F.3d 1367, 62 USPQ2d 1917 (Fed. Cir. 2002) (a determination of obviousness cannot be based on a hindsight combination of components selectively culled from the prior art to fit the parameters of the invention). Appellants respectfully submit that "it is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teaching of the prior art so that the claimed invention is rendered obvious. ... 'One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.'" *In re Fritch*, 972 FG.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992).

Thus, for at least the reasons described above, *Meyers* in view of *Yoshioka* further fails to disclose, teach or suggest all of the features recited in claim 29. Nor has a *prima facie* case of obviousness been established using the art of record. Therefore, Appellants respectfully request that the rejection of claim 29 be overturned.

10.   Dependent Claim 32

Notwithstanding, and in addition to, the arguments discussed above, Appellants respectfully request that the rejection of claim 32 be overturned for at least the reason that *Meyers* in view of *Yoshioka* fails to disclose, teach, or suggest at least the features recited and emphasized below. Appellants' claim 32 provides as follows (emphasis added):

> A data handling method according to claim 29, in which the step (a)
> comprises *associating data management information with at least*

*one data sub-unit as data is read into a memory space from a data
unit comprising a plurality of data sub-units.*

The Office Action states on page 26 that "Meyers et al... do not explicitly disclose ... "associating data management information with at least one data sub-unit as data is read into a memory space from a data unit comprising a plurality of data sub-units," although Yoshioka et al. do suggest a data management unit in association with a policy unit and a memory". Appellants respectfully disagree. Appellants submit that a policy unit and a memory are not the same as a "data sub-unit". Thus, *Meyers* in view of *Yoshioka* does not disclose or suggest "associating data management information with at least one data sub-unit as data is read into a memory space from a data unit comprising a plurality of data sub-units" as recited in claim 32.

Thus, for at least the reasons described above, *Meyers* in view of *Yoshioka* further fails to disclose, teach or suggest all of the features recited in claim 32. Therefore, Appellants respectfully request that the rejection of claim 32 be overturned.

E.   Rejection of Claim 38 under 35 U.S.C. §103(a): *Meyers* and *Johnson*

For the reasons discussed in section B.3 above, *Meyers* fails to disclose, teach or suggest all of the features recited in claim 22. Further, the Office Action concedes on page 17 that *Meyers* does not disclose the features of claim 29. The addition of *Johnson* does not cure the deficiencies of *Meyers*. Because claims 22 and 29 are allowable over *Meyers* in view of *Johnson*, Appellants respectfully submit that claim 38 is allowable for at least the reason that it depends, either directly or indirectly, from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Appellants respectfully request that the rejection of claim 38 be overturned.

Notwithstanding, and in addition to, the arguments discussed above, Appellants respectfully request that the rejection of claim 38 be overturned for at least the reason that a *prima facie* case of obviousness has not been established using the art of record. The Office Action states on page 29 that

Meyers et al... do not explicitly disclose ... "the process instructions are analysed as blocks," although Johnson et al. do suggest addressable privilege levels of code in each address block, as recited below... "each block defined by operations up to a terminating condition," although Johnson et al. do suggest bit sets indicating privilege levels, as recited below...

"the privilege level of the code (and/or data) in each of a plurality of address blocks addressable by the processor" [column 2 lines 41-42]... "The bit being set indicated that the corresponding address block has one privilege level and the bit being cleared indicates that the corresponding address block has the other privilege level" [column 2 lines 46-48]...

Appellants respectfully disagree. Appellants submit that code stored in address blocks is not the same as "process instructions are analysed as blocks". Nor are bit sets indicating privilege levels the same as "each block defined by operations up to a terminating condition," Thus, *Meyers* in view of *Johnson* does not disclose or suggest "the process instructions are analysed as blocks, each block defined by operations up to a terminating condition" as recited in claim 38.

While the Office Action concedes on pages 29 that *Meyers* does not disclose the features of claim 38, the Office Action does not even allege that *Johnson* teaches or suggests that "the process instructions are analysed as blocks", much less that "each block [is] defined by operations up to a terminating condition" as recited in claim 38. "35 U.S.C. 132 requires that the applicant be notified of the reasons for the rejection of the claim so that he or she can decide how best to proceed." MPEP § 2141(II). As expressly embodied in MPEP 2143, "[t]he key to supporting any rejection under 35 U.S.C. §103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. §103 should be made explicit" (emphasis added). The Court stated that "'[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.'" *KSR*, 550 U.S. at 418, 82 USPQ2d at 1396 quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). Thus, for at least the reasons discussed above, Appellants submit that a *prima facie*

case of obviousness has not been established using the art of record. Therefore, Appellants respectfully request that the rejection of claim 38 be overturned.
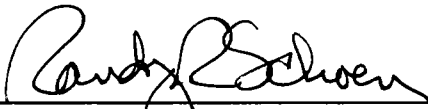
Conclusion

In summary, it is Appellants' position that Appellants' claims are patentable over the applied cited art references and that the rejection of these claims should be overturned. Appellants therefore respectfully request that the Board of Appeals overturn the Examiner's rejection and allow Appellants' pending claims.

In addition to the claims shown in the claims Appendix VIII, Appendix IX attached hereto indicates that there is no evidence being attached and relied upon by this brief. Appendix X attached hereto indicates that there are no related proceedings.

No additional fee is believed to be due. However, any additional fee that may be due or required is authorized to be charged to deposit account no. 08-2025.

Respectfully submitted,

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VIII. Claims Appendix under 37 C.F.R. § 41.37(c)(1)(viii)

The following are the claims that are involved in this Appeal.

1.   (Previously Presented) A data handling apparatus for a computer platform using an

operating system executing a process, the apparatus comprising

      a system call monitor for detecting predetermined system calls and data

manipulated by the process so as to modify identifiable characteristics of the data, and

      means for applying a data handling policy upon detecting:

            (1) a predetermined data type based on a tag or label associated with the

data manipulated by the process or based on the format of the data manipulated by the

process; and

            (2) a predetermined system call being detected, whereby the data

handling policy is applied for all system calls involving the writing of data outside the

process.

2.   (Canceled)

3.   (Previously Presented) A data handling apparatus according to claim 6, in which a policy

interpreter in its application of the policy automatically encrypts the at least some of the

data.

4.   (Original) A data handling apparatus according to claim 1, in which predetermined

system calls are those involving the transmission of data externally of the computing

platform.

5.   (Previously Presented) A data handling apparatus according to claim 1, in which the

means for applying a data handling policy comprises a tag determiner for determining

any security tags associated with data manipulated by the process or based on the

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format of the data manipulated by he process handled by the system call, and a policy interpreter for determining a policy according to any such security tags and for applying the policy.

6.   (Original) A data handling apparatus according to claim 5, in which the policy interpreter is configured to use the intended destination of the data as a factor in determining the policy for the data.

7.   (Original) A data handling apparatus according to claim 5, in which the policy interpreter comprises a policy database including tag policies and a policy reconciler for generating a composite policy from the tag policies relevant to the data.

8.   (Original) A data handling apparatus according to claim 1, in which the computing platform comprises a data management unit, the data management unit arranged to associate data management information with data input to a process, and regulate operating system operations involving the data according to the data management information.

9.   (Original) A data handling apparatus according to claim 8, in which the computing platform further comprises a memory space, and is arranged to load the process into the memory space and run the process under the control of the data management unit.

10.   (Original) A data handling apparatus according to claim 8, in which the data management information is associated with at least one data sub-unit as data is input to a process from a data unit comprising a plurality of sub-units.

11.   (Original) A data handling apparatus according to claim 8, in which data management information is associated with each independently addressable data unit.

12.   (Original) A data handling apparatus according to claim 8, in which the data

        management unit comprises part of an operating system kernel space.

13.   (Original) A data handling apparatus according to claim 12, in which the operating

        system kernel space comprises a tagging driver arranged to control loading of a

        supervisor code into the memory space with the process.

14.   (Original) A data handling apparatus according to claim 13, in which the supervisor code

        controls the process at run time to administer the operating system data management

        unit.

15.   (Original) A data handling apparatus according to claim 14, in which the supervisor code

        is arranged to analyse instructions of the process to identify operations involving the

        data, and, provide instructions relating to the data management information with the

        operations involving the data.

16.   (Original) A data handling apparatus according to claim 13, in which the memory space

        further comprises a data management information area under control of the supervisor

        code arranged to store the data management information.

17.   (Original) A data handling apparatus according to claim 8, in which the data

        management unit comprises a data filter to identify data management information

        associated with data that is to be read into the memory space.

18.   (Original) A data handling apparatus according to claim 8, in which the data

        management unit further comprises a tag management module arranged to allow a user

        to specify data management information to be associated with data.

19.   (Original) A data handling apparatus according to claim 8, in which the data management unit comprises a tag propagation module arranged to maintain an association with the data that has been read into the process and the data management information associated therewith.

20.   (Original) A data handling apparatus according to claim 19, in which the tag propagation module is arranged to maintain an association between an output of operations carried out within the process and the data management information associated with the data involved in the operations.

21.   (Original) A data handling apparatus according to claim 19, in which the tag propagation module comprises state machine automatons arranged to maintain an association between an output of operations carried out within the process and the data management information associated with the data involved in the operations.

22.   (Previously Presented) A data handling method for a computer platform using an operating system executing a process, the method comprising the steps of:

        detecting both (i) a predetermined data type based on a tag or label associated with the data or based on the format of the data and (ii) predetermined system calls involving the writing of data outside the process, and

        applying a data handling policy to a system call upon both said predetermined data type and said a predetermined system call being detected, the data handling policy being applied for all system calls involving the writing of data outside the process.

23.   (Original) A data handling method according to claim 22, in which the policy is to require the encryption of at least some of the data.

24.   (Original) A data handling method according to claim 23, in which in its application of the policy at least some of the data is automatically encrypted.

25.   (Original) A data handling method according to claim 22, in which predetermined system calls are those involving the transmission of data externally of the computing platform.

26.   (Original) A data handling method according to claim 22, in which the method includes the steps of: determining any security tags associated with data handled by the system call, determining a policy according to any such tags and applying the policy.

27.   (Original) A data handling method according to claim 26, in which a composite policy is generated from the tag policies relevant to the data.

28.   (Original) A data handling method according to claim 26, in which the intended destination of the data is used as a factor in determining the policy for the data.

29.   (Original) A data handling method according to claim 22, in which the method further comprises the steps of: (a) associating data management information with data input to a process; and (b) regulating operating system operations involving the data according to the data management information.

30.   (Original) A data handling method according to claim 29, in which supervisor code administers the method by controlling the process at run time.

31.   (Original) A data handling method according to claim 29, in which the step (a) comprises associating data management information with data as the data is read into a memory space.

32.   (Original) A data handling method according to claim 29, in which the step (a) comprises associating data management information with at least one data sub-unit as data is read into a memory space from a data unit comprising a plurality of data sub-units.

33.   (Original) A data handling method according to claim 29, in which the step (a) comprises associating data management information with each independently addressable data unit that is read into the memory space.

34.   (Original) A data handling method according to claim 29, in which the data management information is written to a data management memory space under control of the supervisor code.

35.   (Original) A data handling method according to claim 34, in which the supervisor code comprises state machine automatons arranged to control the writing of data management information to the data management memory space.

36.   (Original) A data handling method according to claim 29, in which the step (b) comprises sub-steps

    (b1) identifying an operation involving the data;

    (b2) if the operation involves the data and is carried out within the process, maintaining an association between an output of the operation and the data management information; and

    (b3) if the operation involving the data includes a write operation to a location external to the process, selectively performing the operation dependent on the data management information.

37.   (Original) A data handling method according to claim 36, in which, the step (b1) comprises: analysing process instructions to identify operations involving the data; and,

providing instructions relating to the data management information with the operations involving the data.

38.   (Original) A data handling method according to claim 29, in which the process instructions are analysed as blocks, each block defined by operations up to a terminating condition.

39.   (Previously Presented) A computer program stored in computer readable media for controlling a computing platform to operate in accordance with claim 22.

40.   (Original) A computer platform configured to operate according to claim 22.

41.   (Previously Presented) A data handling apparatus for a computer platform using an operating system executing a process, the apparatus comprising

a system call monitor for detecting predetermined system calls and data handled by the process, and

a policy applicator for applying a data handling policy to the system call upon both (i) a predetermined data type based on a tag or label associated with the data handled by the process or based on the format of the data handled by the process and (ii) a predetermined system call which involves the writing of data outside the process.

IX. Evidence Appendix under 37 C.F.R. § 41.37(c)(1)(ix)

None.

X. <u>Related Proceedings Appendix under 37 C.F.R. § 41.37(c)(1)(x)</u>

None.